

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF CALIFORNIA

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TECHNOLOGY LICENSING
CORPORATION, a California
corporation, and AV
TECHNOLOGIES LLC, an Illinois
Limited Liability Company,

Plaintiffs,

v.

THOMSON, INC., a Delaware
corporation,

Defendant.

NO. CIV. S-03-1329 WBS PAN

MEMORANDUM AND ORDER RE:
DEFENDANT'S MOTIONS FOR
SUMMARY JUDGMENT AND
DEFENDANT'S MOTION TO LIMIT
EXPERT TESTIMONY

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Plaintiff's¹ amended complaint alleges that defendant
infringed four patents. Three motions are presently before the
court:

- Defendant's motion for summary judgment of no infringement

¹ Plaintiff AV Technologies has rights to United States
Patent 4,573,070 ("the '070 patent"). Since the court held that
no damages could be recovered under the '070 patent, only one
plaintiff, Technology Licensing Corporation, still has an
interest in this case. (See July 1, 2005 Order).

1 of the 5,495,524 patent ("the '524 patent");

- 2 • Defendant's motion for summary judgment on the grounds that
- 3 it does not make, use, or sell the allegedly infringing
- 4 products;
- 5 • Defendant's motion to limit plaintiff's expert testimony
- 6 evidence to opinions served by May 16, 2005.

7 I. Factual and Procedural Background

8 The four patents alleged to be infringed were issued to
9 J. Carl Cooper, who assigned his rights under those patents to
10 plaintiff Technology Licensing Corporation ("TLC"). (Am. Compl.)
11 The infringement claims regarding two of those patents were
12 stayed by court order on September 20, 2004. The claims
13 regarding patents 4,573,070 ("the '070 patent") and the '524
14 patent were not stayed. However, on July 1, 2005, the court
15 issued an order holding that plaintiffs could recover no damages
16 for infringement of the '070 patent. (July 1, 2005 Order at 6,
17 12). Counsel for the parties agreed at the pretrial conference
18 that all issues regarding the '070 patent are now moot.²
19 Therefore, the only claims for infringement that the court must
20 address are those involving the '524 patent.

21 II. Discussion

22 A. Summary Judgment Standard

23 The court must grant summary judgment to a moving party
24 "if the pleadings, depositions, answers to interrogatories, and
25 admissions on file, together with the affidavits, if any, show
26

27 ² Therefore, defendant's motion for summary judgment of
28 no infringement of claims 1-2 and 22-24 of the '070 patent is moot.

that there is no genuine issue as to any material fact and that the moving party is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(c). The party adverse to a motion for summary judgment may not simply deny generally the pleadings of the movant; the adverse party must designate "specific facts showing that there is a genuine issue for trial." Fed. R. Civ. P. 56(e); see Celotex Corp. v. Catrett, 477 U.S. 317 (1986). Simply put, "a summary judgment motion cannot be defeated by relying solely on conclusory allegations unsupported by factual data." Taylor v. List, 880 F.2d 1040, 1045 (9th Cir. 1989). The non-moving party must show more than a mere "metaphysical doubt" as to the material facts. Matsushita Elec. Indus. Co. v. Zenith Radio, 475 U.S. 574, 587 (1986).

B. Defendant's Motion for Summary Judgment of No Infringement of the '524 Patent

Defendant argues that plaintiff has failed to produce evidence showing that defendant's products have infringed the '524 patent, and that therefore summary judgment in defendant's favor is in order.

1. Plaintiff's Failure to Allege Infringement of Each Claim Limitation of Claim 11

A determination of patent infringement requires a two-step analysis. The first step is to construe the asserted claims. The second step is to determine whether the accused method or product infringes any of the properly construed claims. Markman v. Westview Instruments, Inc., 52 F.3d 967, 976 (Fed. Cir. 1995), aff'd 517 U.S. 370 (1996). Claim construction and interpretation are matters of law. Markman, 52 F.3d at 979. The

1 second step is a factual question. Bai v. L & L Wings, Inc., 160
2 F.3d 1350, 1353 (Fed. Cir. 1998). "To prove infringement [of a
3 patent claim], the patentee must show that the accused device
4 meets each claim limitation, either literally or under the
5 doctrine of equivalents."³ Deering Precision Instruments, L.L.C.
6 v. Vector Distrib. Sys., Inc., 347 F.3d 1314, 1324 (Fed. Cir.
7 2003) (emphasis added). Therefore, summary judgment in favor of
8 the allegedly infringing defendant is proper if the court
9 determines that no reasonable jury could find that every claim
10 limitation recited in the patent claim at issue is also found in
11 the accused device. Bai, 160 F.3d at 1353.

12 Defendant argues that claim 11 of the '524 patent
13 contains three means-plus-function limitations. A means-plus-
14 function limitation is one that does not set forth within the
15 claim a specific structure that is capable of entirely performing
16 the recited function. 35 U.S.C. § 112;⁴ Sage Prods. v. Devon
17 Indus., 126 F.3d 1420, 1427-28 (Fed. Cir. 1997).

18 A limitation containing the word "means" is presumed to
19 be a means-plus-function limitation; conversely, a limitation
20 that does not contain the word "means" is presumed to not be a
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22 ³ Plaintiff has disclaimed any reliance on the doctrine
23 of equivalents, and may not argue that doctrine now. (July 1,
2005 Order at 12-13).

24 ⁴ An element in a claim for a combination may be
25 expressed as a means or step for performing a specified
26 function without the recital of structure, material, or
27 acts in support thereof, and such claim shall be
construed to cover the corresponding structure,
material, or acts described in the specification and
equivalents thereof.

28 35 U.S.C. § 112, ¶ 6.

1 means-plus-function limitation. Personalized Media
2 Communications, LLC v. Int'l Trade Comm'n, 161 F.3d 696, 703-04
3 (Fed. Cir. 1998); see also York Prods., Inc. v. Cent. Tractor
4 Farm & Family Ctr., 99 F.3d 1568, 1574 (Fed. Cir.
5 1996) (presumption is that inventor uses the term "means" with
6 knowledge of its legal effect). In deciding whether the
7 presumption has been rebutted, "the focus remains on whether the
8 claim as properly construed recites sufficiently definite
9 structure to avoid the ambit of § 112, ¶ 6." Personalized Media,
10 161 F.3d at 704.

11 If a court determines that a claim limitation is a
12 means-plus-function limitation, the next step is to look within
13 the patent specification to determine the corresponding structure
14 that performs that function by those means. Medtronic, Inc. v.
15 Advanced Cardiovascular Sys., Inc., 248 F.3d 1303, 1311 (Fed.
16 Cir. 2001). A "specification" is a term of art that denotes the
17 claims and also the description of the invention preceding the
18 claims within the patent itself. 35 U.S.C. § 112. A means-plus-
19 function limitation is infringed only if the accused device
20 performs the identical function by means of identical or
21 equivalent structures to the corresponding structures in the
22 patent specification. WMS Gaming, Inc. v. Int'l Game Tech., 184
23 F.3d 1339, 1347 (Fed. Cir. 1999).⁵

24 In this case, '524 patent claim 11 teaches:

25 A demodulator apparatus operable for demodulating
26 information content of a modulated carrier, which modulated
27 carrier has an associated carrier reference signal which may

28 ⁵ The court again notes that plaintiff has abandoned any
use of the doctrine of equivalents.

1 be separate therefrom, said demodulating including operating
2 on said modulated carrier in response to at least one
demodulator reference signal generated by said demodulator,
said apparatus including in combination;

3 sampling means to sample said carrier reference at a
4 plurality of known times thereby producing a set of a
plurality of carrier reference samples,

5 determining means for determining a value which is
6 statistically descriptive of a parameter of said set of
carrier reference samples, and

7 generating means responsive to said value for generating
8 said demodulator reference signal.

9 U.S. Patent No. 5,459,524 (issued Oct. 17, 1995) (emphasis added).

10 Because the three limitations for "sampling means," "determining
11 means," and "generating means" all contain the word "means," the
12 presumption is that these are means-plus-function limitations.

13 See Personalized Media, 161 F.3d at 703-04.

14 Plaintiff has not effectively rebutted that
15 presumption, as it has not pointed to a structure within the
16 claim itself that performs the recited function. See Sage, 126
17 F.3d at 1427-28. Plaintiff's only argument as to why these
18 limitations are not means-plus-function limitations is that the
19 sampling means, determining means, and generating means are
20 "well-known circuit function[s]." (Pl.'s Mem. in Supp. of Opp'n
21 to Def.'s Mot. for Summ. J. of Noninfringement of the '524 Patent
22 at 3-4) (citing Cooper Decl. Ex. F (deposition of Cooper) at 186-
23 87). Plaintiff's counsel states that "[p]ursuant to the case law
24 cited on page 13 of Mr. Cooper's report, none of these is a means
25 plus function limitation." (Id. at 4). Turning to page 13 of
26 Cooper's report, Cooper claims that "a 'circuit' is structure
27 sufficient to avoid means plus function treatment." (Cooper Decl.
28 in Supp. of Opp'n to Def.'s Mot. for Summ. J. of Noninfringement

1 of the '524 Patent Ex. D (March 28, 2005 Cooper expert report) at
2 13). Cooper cites Apex Inc. v. Raritan Computer, 325 F.3d 1364
3 (Fed. Cir. 2003), for this proposition. However, Apex is
4 distinguishable from this case in at least three significant
5 ways. First, the limitations in '524 patent claim 11 do not use
6 the word "circuit." Second, even if one assumes that the terms
7 "sampling means," "determining means," and "generating means"
8 somehow denote a "circuit," the Apex court specifically refutes
9 Cooper's legal contention by noting that "we do not find it
10 necessary to hold that the term 'circuit' by itself always
11 connotes sufficient structure." Id. at 1373. Third, the claim
12 limitations at issue in Apex did not use the term "means." Id.
13 at 1372.

14 The court need look no further than claim 11 and the
15 test in Sage Products to determine that the "sampling means,"
16 "determining means," and "generating means" limitations are
17 means-plus-function limitations. A means-plus-function
18 limitation is one that does not set forth within the claim a
19 specific structure that is capable of entirely performing the
20 recited function. Sage Products, 126 F.3d at 1427-28. Cooper,
21 in a declaration submitted in support of plaintiff's opposition
22 to defendant's motion for summary judgment, states that the
23 "sampling means" is the analog to digital converter, (Cooper
24 Decl. ¶ 2(b)), the "determining means" is a "digital phase
25 comparator or a digital frequency comparator," (id. ¶ 2(d)), and
26 the "generating means" is a "digital oscillator and sine (or
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1 cosine) look-up table." (Id. 2(e)).⁶ Unfortunately for
2 plaintiff, these structures are recited only in Cooper's
3 declaration and not within claim 11 itself. Cooper's declaration
4 thus conclusively shows that the "sampling means," "determining
5 means" and "generating means" limitations are means-plus-function
6 limitations.

7 When a claim limitation is expressed as a means for
8 performing a specified function, without the recital of structure
9 within the claim, the claim is construed to cover the
10 corresponding structure described in the specification.⁷

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12 ⁶ Defendant vigorously objects to any consideration by
13 the court of Cooper's declaration, filed June 27, 2005, in
14 deciding this motion. (See Def.'s Mot. to Limit Pl.'s Expert
15 Testimony Evidence to Opinions Served by May 16, 2005).
16 Defendant argues that this is essentially additional expert
17 testimony that plaintiff did not disclose in the expert reports
18 required under Federal Rule of Civil Procedure 26.

19 The court finds that Cooper's declaration may be
20 considered. Because Cooper steadfastly maintained in his expert
21 reports that none of the claims contained means-plus-function
22 limitations, he did not provide the corresponding structures.

23 Since there is a presumption that use of the word
24 "means" within a limitation implies means-plus-function, and
25 since an inventor is presumed to know the legal effect of the
26 word "means," York Prods., 99 F.3d at 1574, defendant has a
strong argument that Cooper should have provided defendant in his
expert reports with what Cooper believes would be the
corresponding structure in the specifications should the court
find that claim 11 contains means-plus-function limitations.
However, the court finds it to be in the interest of justice for
plaintiff to be able to defend itself against defendant's motion
for summary judgment by explaining to what structures the means-
plus-function limitations of claim 11 refer, now that the court
has held that those limitations are indeed means-plus-function
limitations. In the end it makes no difference, as explained
below, since plaintiff has not alleged that defendant literally
infringed the structures Cooper argues are referred to by the
means-plus-function limitations of claim 11.

27 ⁷ Plaintiff misconstrues defendant's argument that claim
28 11 does not recite the structure corresponding to the relevant
limitations within the claim itself. Plaintiff views this as an
argument against the validity of the '524 patent. Defendant does

1 Medtronic, 248 F.3d at 1311. Although the court first looks to
 2 the patent claims, specification, and file history to identify
 3 the structure that corresponds to the means-plus-function
 4 limitation, the court may also look to expert testimony where the
 5 intrinsic evidence is insufficient. See Key Pharms. v. Hercon
 6 Lab. Corp., 161 F.3d 709, 716 (Fed. Cir. 1998) (finding district
 7 court's reliance on extrinsic evidence to construe the patent
 8 appropriate). "Trial courts generally can hear expert testimony
 9 for background and education on the technology implicated by the
 10 presented claim construction issues, and trial courts have broad
 11 discretion in this regard." Id. "In construing a 'means plus
 12 function' claim, . . . expert testimony may be considered."
 13 Medtronic, Inc. v. Intermedics, Inc., 799 F.2d 734, 742 (Fed.
 14 Cir. 1986).

15 Here, defendant Thomson provides a detailed table, set
 16 out in the margin,⁸ with the specific structures in the

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 23 not argue that the '524 patent is invalid, but only argues that
 24 the structures referred to in the relevant limitations of claim
 25 11 are to be found elsewhere in the patent specification.

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LIMITATION	CORRESPONDING STRUCTURE	SUPPORT
sampling means	the analog to digital (A-D) converter 68 , chroma filter 82 , and either (1) the sync separator 69 and the phase locked loop (PLL) 70 locked to the horizontal (H) sync signals; or (2) the band pass filter 71 and the burst PLL 72 (see Figure 4 and described at Col. 4, lines 32-42 and 49-51).	Lechner Decl. ¶ 7

specification of the '524 patent that it argues correspond to each of the three means-plus-function limitations. (Def.'s Mem. in Supp. of Mot. for Summ. J. of Noninfringement of the '524 at 11-12) (citing Lechner Decl. ¶¶ 7, 11, 15).

Cooper, in a declaration submitted in support of opposition to defendant's motion for summary judgment, states that the "sampling means" is the analog to digital converter, (Cooper Decl. ¶ 2(b)), the "determining means" is a "digital phase comparator or a digital frequency comparator," (*id.* ¶ 2(d)), and the "generating means" is a "digital oscillator and

determining means	<p>all the components of the burst/sample phase detector 84 shown in Figure 5 and described at Col. 5, line 62 to Col. 6, line 60 of the '524 Patent.</p> <p>An alternative structure for a portion of the burst/sample phase detector 84 is shown in the upper half of Figure 7 and described at Col. 7, line 63 to Col. 8, line 22.</p> <p>Another alternative structure for the burst/sample detector 84 is shown in Figure 10 and described at Col. 12, lines 14-44.</p>	Lechner Decl. ¶ 11
generating means	<p>all of the components of the chroma reference generator 94 shown in Figure 5 and described at Col. 6, line 61 to Col. 7, line 16.</p> <p>An alternative structure for the chroma reference generator 94 is shown in the lower half of Figure 7 and described at Col. 7, line 63 to Col. 8, line 5 and Col. 10, lines 35-60.</p> <p>Another alternative structure for the chroma reference generator 94 is shown in Figure 10 and described at Col. 12, lines 14-67.</p>	Lechner Decl. ¶ 15

1 sine (or cosine) look-up table.” (Id. ¶ 2(e)). at 42).

2 The court need not determine which party is correct in
3 identifying the structures that correspond to the three means-
4 plus-function limitations of claim 11. Even if one assumes
5 plaintiff’s interpretation to be the correct one, plaintiff still
6 has not alleged that defendant’s products infringe those
7 structures. In this case, plaintiff must show, for each accused
8 device, that it meets each limitation of the claim alleged to be
9 infringed. See Deering, 347 F.3d at 1324. Since plaintiff does
10 not allege infringement by the doctrine of equivalents, plaintiff
11 must show that the accused device performs the identical function
12 by means of structures identical to those described in the
13 patent. See WMS Gaming, 184 F.3d at 1347.

14 Cooper declares that the structure referred to by the
15 “sampling means” means-plus-function limitation is an “analog to
16 digital converter.” (Cooper Decl. in Supp. of Opp’n to Def.’s
17 Mot. for Summ. J. of No Infringement of the ‘524 Patent ¶ 2(b)).
18 In his expert report, Cooper declares that both the 8960DEC
19 Decoder with the TMC22x5y integrated circuit and the TI5000
20 family of integrated circuits contain analog to digital
21 converters. (Id. Ex. D (Mar. 28, 2005 Cooper expert report)
22 subexs. D & F).⁹ Were the court to adopt plaintiff’s
23 interpretation of the structure that corresponds to the “sampling
24 means,” this would be a sufficient allegation of literal
25 infringement.

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27 ⁹ Cooper’s expert report, attached to his declaration,
28 itself contains exhibits. The court labels those exhibits to the
Cooper expert report as subexhibits.

1 However, Cooper does not make sufficient allegations of
2 literal infringement with respect to the "determining means" and
3 the "generating means." Cooper argues that the "determining
4 means" is a "digital phase comparator or a digital frequency
5 comparator." (Id. ¶ 2(d)). Yet neither of these structures are
6 found listed in the tables in Cooper's expert report that purport
7 to show why defendant's products infringe. Cooper alleges that
8 the 8960DEC decoder infringes the "determining means" limitation
9 with structure identified as a "subcarrier phase-locked loop
10 circuit" and a "fully-digital phase-locked loop." (Id. Ex. D
11 (Mar. 28, 2005 Cooper expert report) subex. D). Plaintiff has
12 not argued that these structures found in the 8960DEC decoder are
13 simply "digital phase comparators" or "digital frequency
14 comparators" by another name. Therefore, even if defendant's
15 8960DEC decoder contains a "subcarrier phase-locked loop circuit"
16 and a "fully-digital phase-locked loop," plaintiff has not made a
17 sufficient allegation that these structures infringe plaintiff's
18 structures pursuant to the "determining means" limitation of
19 claim 11. Similarly, plaintiff alleges that the TI5000 family of
20 integrated circuits infringe the "determining means" limitation
21 with structures identified as "burst accumulators U and V." (Id.
22 Ex. D (Mar. 28, 2005 Cooper expert report) subex. F). The court
23 finds no indication that plaintiff has alleged that "burst
24 accumulators" literally infringe "digital phase comparators" or
25 "digital frequency comparators."

26 Cooper argues that the "generating means" is a "digital
27 oscillator and sine (or cosine) look-up table." (Id. 2(e)).
28 However, neither of these structures are found listed in the

1 tables in Cooper's March 28, 2005 expert report that purport to
2 show why defendant's products infringe. Cooper does not allege
3 any infringing structure contained within the 8960DEC decoder.
4 The allegation is as follows: "The TMC22x5y produces the sine and
5 cosine demodulator reference signals [citation omitted] in
6 response to the phase and frequency information." (Id. Ex. D
7 (Mar. 28, 2005 Cooper expert report) subex. D). This is not a
8 sufficient allegation of infringement, as plaintiff must show
9 that the accused device performs the identical function by means
10 of structures identical to those described in the patent. See
11 WMS Gaming, 184 F.3d at 1347. With respect to the TI5000 family
12 of integrated circuits, plaintiff alleges that the TI5000
13 circuits infringe the "generating means" limitation with an
14 "internal color subcarrier PLL." (Id. Ex. D. (Mar. 28, 2005
15 Cooper expert report) subex. F). Plaintiff has not argued that
16 the "internal color subcarrier PLL" allegedly found in the TI5000
17 family of integrated circuits is simply a "digital oscillator and
18 sine (or cosine) look-up table" by another name. Therefore, even
19 if defendant's 8960DEC decoder contains an "internal color
20 subcarrier PLL," plaintiff has not made a sufficient allegation
21 that this structure infringes plaintiff's structure pursuant to
22 the "generating means" limitation of claim 11.

23 In conclusion, no matter how the court interprets claim
24 11 of the '524 patent, plaintiff has not made a sufficient
25 allegation of literal infringement, and defendant's motion for
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summary judgment on this claim must be granted.¹⁰

2. Plaintiff's Failure to Allege Infringement of the
Method Claims 27 and 41

Claims 27¹¹ and 41¹² of the '524 patent are method

¹⁰ There can be no liability for inducing infringement or contributory infringement in the absence of direct infringement. Met-Coil Sys. Corp. v. Korner Unlimited, Inc., 803 F.2d 684, 687 (Fed. Cir. 1986). Therefore, the court finds no inducement of infringement or contributory infringement of '524 patent claim 11.

¹¹ The method of generating a decoding reference signal phase locked to a carrier reference signal, including the steps of;

sampling the carrier reference signal to produce a set of samples,

finding a phase increment value representative of the change of phase of said carrier reference signal from one sample to the next,

setting said decoding reference signal to a known phase value,

incrementing said known phase value of said decoding reference by the amount of said phase increment value.

U.S. Patent No. 5,459,524, claim 27 (issued Oct. 17, 1995).

¹² The method of decoding a color video signal to recover the color difference signals modulated on a color subcarrier therein, including the steps of;

generating a sampling clock phase locked to horizontal sync pulses of said color video signal,

sampling said color video signal with an analog to digital converter thereby producing digital samples thereof,

filtering the color subcarrier out of the said digital samples thereby producing color samples,

producing a burst flag in response to said horizontal sync pulses,

computing a statistical representative value of the change of phase of the color burst from sample to

1 claims. "A method claim is directly infringed only by one
2 practicing the patented method." Joy Techs. v. Flakt, Inc., 6
3 F.3d 770, 775 (Fed. Cir. 1993) (emphasis in original). "[A]
4 method claim is not directly infringed by the sale of an
5 apparatus even though it is capable of performing only the
6 patented method." Id. at 774. Plaintiff has presented no
7 evidence that defendant used the methods claimed in '524 patent
8 claims 27 and 41. Therefore, summary judgment of no direct
9 infringement of methods claims 27 and 41 is appropriate.

10 The next question is whether Thomson's sale of the
11 8960DEC and the TI5000 family to others constitutes contributory
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16 sample in response to said color samples and said burst
flag,

17 generating a reference phase signal from a phase
18 accumulator,

19 incrementing the phase of said reference phase signal
20 by the amount of said statistical representative value
of the change of phase for each clock of said sampling
clock,

21 offsetting the value of said reference phase by a known
22 amount,

23 generating the sine and cosine values corresponding to
24 the value of said reference phase at each new value
thereof,

25 multiplying each of said chroma samples by said sine
26 value and by said cosine value thereby producing
unfiltered color difference signals, and

27 filtering said unfiltered color difference signals to
28 produce said color difference signals.

U.S. Patent No. 5,459,524, claim 41 (issued Oct. 17, 1995).

1 infringement or inducement of infringement.¹³ See 35 U.S.C. §
2 271(b), (c). "Absent direct infringement of the patent claims,
3 there can be neither contributory infringement nor inducement of
4 infringement." Met-Coil Sys., Inc. v. Korner Unlimited, Inc.,
5 803 F.2d 684, 687 (Fed. Cir. 1986). Patentee bears the burden of
6 establishing infringement. Linear Tech. Corp. v. Impala Linear
7 Corp., 379 F.3d 1311, 1325 (Fed. Cir. 2004). Thus, plaintiff
8 must prove direct infringement of the method patent by a third
9 party if it is to succeed. See Joy Techs., 6 F.3d at 776(holding
10 that seller of equipment cannot be a contributory infringer where
11 it is established that there will be no direct infringement of
12 method patent by buyers of equipment); Linear Tech., 379 F.3d at
13 1326("[A] party may still be liable for inducement or
14 contributory infringement of a method claim under 35 U.S.C. §§
15 271(b), (c) if it sells infringing devices to customers who use
16 them in a way that directly infringes the method claim.").

17 The court looks to the March 28, 2005 report by J. Carl
18 Cooper, plaintiff's expert and inventor of the allegedly
19 infringed device. (See Cooper Decl. in Supp. of Opp'n to Def.'s
20 Mot. for Summ. J. of No Infringement of the '524 Patent Ex. D).
21 That report includes tables showing how defendant's products are
22 alleged to infringe. (Id. Ex. D subexs. D & F). The portions of
23 the tables that describe how defendant's products allegedly

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25 ¹³ Defendant argues that Thomson, Inc. (defendant) did not
26 sell the accused products, but rather that Thomson Broadcast
27 Media Solutions was the seller. However, defendant never
28 informed plaintiff of this argument in any discovery response it
provided to plaintiff. The court need not resolve this issue,
since even if one assumes that Thomson did sell the products,
summary judgment in favor of Thomson still must be granted.

infringe is set out in the margins.¹⁴ The court cites, in full,

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U.S. Patent 5,459,524	Thomson Products Including the 8960DEC Decoder
<p><u>Claim 27</u></p> <p>The method of generating a decoding reference signal phase locked to a carrier reference signal, including the steps of;</p>	<p>The TMC22071A <u>is</u> an integrated circuit which receives "standard baseband composite NTSC or PAL video". The carrier <u>is</u> the color subcarrier portion of the video signal input to the 071 or other A/D. The carrier reference signal <u>is</u> the color burst on the NTSC or PAL video.</p> <p>The TMC22x5y responds to digitized video from the TMC22071A or other A/D. It includes the same subcarrier phase-locked loop circuit and capabilities of the TMC22071 in its burst locked loop circuit.</p>
<p>sampling the carrier reference signal to produce a set of samples,</p>	<p>The sampling is done by the TMC22071 (or other A/D converter) producing a plurality of samples of the color burst (the carrier reference samples) of the input analog video signal. The plurality of burst samples are coupled via the adaptive comb filter in the TMC22x5y to the burst locked loop of Figure 21.</p>
<p>finding a phase increment value representative of the change of phase of said carrier reference signal from one sample to the next,</p>	<p>The magnitude of the U and V data within the demodulated burst signal provides the error signal which, after filtering, is used to adjust the frequency and/or phase of the subcarrier DDS. The TMC22x5y burst locked loop also contains an internal 28 bit Direct Digital Synthesizer (DDS) which is phase locked to the burst signal of the digitized video input. The phase increment value is a 28 bit number stored in the FREQ register for the DDS and represents the change of phase of the burst from one sample to the next.</p>

<p>setting said decoding reference signal to a known phase value,</p>	<p>The sine and cosine signals are phase locked to the incoming burst signals. One of two programmable 16 bit system phase offsets can be added to the subcarrier oscillator between SAV and EAV. The selected 16 bit number is used to set the decoding reference signal at the startup beginning of line. After startup this DDS phase number is incremented (DRS SEED) and can be read as DDSPH at register 40. In the line grab mode both the DRS SEED and DRS PHASE values of the DRS are frozen and reloaded at the beginning of the grabbed line.</p>
<p>incrementing said known phase value of said decoding reference by the amount of said phase increment value.</p>	<p>The error signal is used to adjust the phase of the subcarrier DDS. The 28 bit digital FREQ number is used by the DDS to increment the initial 16 bit phase value of the decoding reference signal at every clock throughout the line. The starting value of the DDS at the beginning of the line is the DRS SEED.</p>
<p><u>Claim 41</u></p> <p>The method of decoding a color video signal to recover the color difference signals modulated on a color subcarrier therein, including the steps of;</p>	<p>The TMC22071A <u>is</u> an integrated circuit which receives standard baseband composite NTSC or PAL video. The modulated carrier <u>is</u> the color subcarrier portion of the video signal input to the 071 or other A/D.</p> <p>The TMC22x5y responds to digitized video from the TMC22071A or other A/D. It includes the same subcarrier phase-locked loop circuit and capabilities of the TMC22071 in its burst locked loop circuit.</p>
<p>generating a sampling clock phase locked to horizontal sync pulses of said color video signal,</p>	<p>In the TMC22x5y, the clock can be locked to the line frequency or the subcarrier frequency of the digitized waveform. It may be noted that the subcarrier frequency of NTSC video is locked to horizontal (line frequency) thus in either mode the clock is phase locked to horizontal sync pulses.</p>

1 2 3 4 5 6	sampling said color video signal with an analog to digital convertor thereby producing digital samples thereof,	The sampling is done by the TMC22071 (or other A/D converter) producing a plurality of samples of the input analog video signal. The plurality of samples are coupled to the adaptive comb filter in the TMC22x5y of Figure 21.
7 8 9	filtering the color subcarrier out of the said digital samples thereby producing color samples,	The samples of the input analog video signal from the TMC22071 or other A/D are coupled to the adaptive comb filter of the TMC22x5y which filters the color subcarrier out of the digital samples thereby producing color samples.
10 11 12	producing a burst flag in response to said horizontal sync pulses,	A burst flag is produced by the internal sync pulse generator in response to H sync.
13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	computing a statistical representative value of the change of phase of the color burst from sample to sample in response to said color samples and said burst flag,	<p>When used with an A/D other than the TMC22071, the TMC22x5y includes its own subcarrier phase-locked loop circuit, the same as that of the TMC22071 as described under "Subcarrier Phase-Locked Loop" on page 3 of the 071 data sheet. A fully-digital phase-locked loop is used to extract the phase and frequency of the incoming color burst. Each of the phase and frequency information (whether derived from the TMC22071 or from its internal circuit when used with another A/D) is a value which is statistically descriptive of a parameter of the set of carrier (burst) references.</p> <p>The magnitude of the U and V data within the demodulated burst signal provides the error signal which, after filtering, is used to adjust the frequency and/or phase of the subcarrier DDS. The TMC22x5y burst locked loop also contains an internal 28 bit Direct Digital Synthesizer (DDS) which is phase locked to the burst signal of the digitized video input. The phase increment value is a 28 bit number stored in the FREQ register for the DDS and represents the change of phase of the burst from one sample to the next.</p>

generating a reference phase signal from a phase accumulator,	The burst locked loop provides sine and cosine signals.
Incrementing the phase of said reference phase signal by the amount of said statistical representative value of the change of phase for each clock of said sampling clock,	The error signal is used to adjust the phase of the subcarrier DDS. The 28 bit digital FREQ number is used by the DDS to increment the initial 16 bit phase value of the decoding reference signal at every clock throughout the line. The starting value of the DDS at the beginning of the line is the DRS SEED.
offsetting the value of said reference phase by a known amount,	The phase of reference is offset by a known amount to adjust the system phase offset. One off two programmable 16 bit system phase offsets can be added to the subcarrier oscillator between SAV and EAV.
generating the sine and cosine values corresponding to the value of said reference phase at each new value thereof,	The TMC22x5y produces the sine and cosine demodulator reference signals in response to the phase and frequency information.
multiplying each of said chroma samples by said sine value and by said cosine value thereby producing unfiltered color difference signals, and	In the TMC22x5y, "sine and cosine signals are used to demodulate the chrominance data, producing the U and V color-difference signals. The modulated carrier is the chrominance, operated on by the two multipliers in response to the sine and cosine signals.
filtering said unfiltered color difference signals to produce said color difference signals.	The U and V color difference signals are filtered by LPFs to produce filtered color difference signals.

(Cooper Decl. in Supp. of Opp'n to Def.'s Mot. for Summ. J. of No Infringement of the '524 Patent Ex. D, subex. D) (emphasis added) (citations to the record omitted).

U.S. Patent 5,459,524	Thomson Products Using the TI5000 Family
<u>Claim 27</u> The method of generating a decoding reference signal phase locked to a carrier reference signal, including the steps of;	The TI5000 family <u>generates</u> a decoding reference signal (color subcarrier reference signal) phase-locked to a carrier reference signal (burst).
sampling the carrier reference signal to produce a set of samples,	The ADC (analog to digital converter) samples the carrier reference (burst) at a plurality of known times (sampling clocks) to produce a plurality of carrier reference samples (samples of the burst).
finding a phase increment value representative of the change of phase of said carrier reference signal from one sample to the next,	The burst accumulators U and V determine a value (F_{ctrl}) which is statistically descriptive of a parameter (sample to sample phase change or frequency) of said set of carrier reference samples (burst samples).
setting said decoding reference signal to a known phase value,	The subcarrier phase is reset to a known phase value by the subcarrier phase reset bit (GLCO/RTC).
incrementing said known phase value of said decoding reference by the amount of said phase increment value.	The known phase of the decoding reference (subcarrier) is incremented by the amount of the phase increment value (F_{ctrl}) by SCLK.
<u>Claim 41</u> The method of decoding a color video signal to recover the color difference signals modulated on a color subcarrier therein, including the steps of;	The TI5000 family <u>operates</u> to demodulate the information content of an NTSC or PAL analog video signal having chroma information carried on a modulated carrier. 21

generating a sampling clock phase locked to horizontal sync pulses of said color video signal,	The clock circuits generate a sampling clock (SCLK) phase-locked to horizontal sync of the incoming video.
sampling said color video signal with an analog to digital convertor thereby producing digital samples thereof,	The color video signal is sampled by the ADC to produce digital samples.
filtering the color subcarrier out of the said digital samples thereby producing color samples,	Color low-pass filters filter the color subcarrier out of the digital samples to produce color samples.
producing a burst flag in response to said horizontal sync pulses,	The burst accumulators utilize a burst flag produced by the snyc [sic] processor to identify bursts.
computing a statistical representative value of the change of phase of the color burst from sample to sample in response to said color samples and said burst flag,	The burst accumulators U and V determine a value (F_{ctrl}) which is statistically descriptive of a parameter (sample to sample phase change or frequency) of said set of carrier reference samples (burst samples).
generating a reference phase signal from a phase accumulator,	The internal color subcarrier PLL is responsive to the F_{ctrl} value for generating the demodulator reference signal (color subcarrier).
Incrementing the phase of said reference phase signal by the amount of said statistical representative value of the change of phase for each clock of said sampling clock,	The known phase of the decoding reference (subcarrier) is incremented by the amount of the phase increment value (F_{ctrl}) by SCLK.
offsetting the value of said reference phase by a known amount,	The value of the reference subcarrier phase is offset by the hue value to provide hue adjustment.

the charts showing the evidence upon which plaintiff will rely to prove infringement of claims 27 and 41 of the '524 patent to show that nowhere does plaintiff allege that defendant or anyone else actually practiced the method. Further, plaintiff does not allege that defendant's products only perform the patented method. It is conceivable that the parts of defendant's products that could allegedly be used to infringe the patented method could also be used to perform some other function.

To use a baseball analogy, it is like the patentee patented "the method of hitting a baseball free hand using a bat with a long, skinny handle." In that situation, the patentee's evidence that "the defendant's product is a bat with a long, skinny handle suitable for hitting a baseball free hand" is not

generating the sine and cosine values corresponding to the value of said reference phase at each new value thereof,	The quadrature demodulation generates sine and cosine values corresponding to the value of the reference subcarrier phase at each new value produced by the internal color subcarrier PLL.
multiplying each of said chroma samples by said sine value and by said cosine value thereby producing unfiltered color difference signals, and	The quadrature demodulation multiplies each chroma sample by the sine and cosine values to produce color difference signals (U, V).
filtering said unfiltered color difference signals to produce said color difference signals.	The unfiltered color difference signals (U, V) are filtered by the respective color low-pass filters to produce the U and V color difference signals.

(Cooper Decl. in Supp. of Opp'n to Def.'s Mot. for Summ. J. of No Infringement of the '524 Patent Ex. D, subex. F) (emphasis added) (citations to the record omitted).

1 enough to infringe the method patent. It is conceivable that
2 nobody ever used the hypothetical defendant's bat for that
3 purpose. It is also conceivable that the defendant's bat is used
4 for another purpose, such as propping up windows. Plaintiff
5 bears the burden of proof on infringement, Linear Tech., 379 F.3d
6 at 1325, and plaintiff must be able to show evidence that
7 somebody performed the patented method. Joy Techs., 6 F.3d at
8 776. Plaintiff has not done so, and therefore summary judgment
9 in favor of defendant on the claim of infringement of claims 27
10 and 41 of the '524 patent must be granted.

11 C. Defendant's Motion for Summary Judgment of No
12 Infringement of the '524 Patent Due to Prosecution
13 Disclaimer

14 The prior two sections are sufficient for the court to
15 grant defendant's motion for summary judgment of no infringement
16 of the '524 patent. However, the court finds that the doctrine
17 of prosecution disclaimer provides independent, additional
18 grounds upon which to grant summary judgment.

19 The doctrine of prosecution disclaimer precludes
20 patentees from recapturing through claim interpretation specific
21 meanings disclaimed during prosecution. Omega Eng'g, Inc. v.
22 Raytek Corp., 334 F.3d 1314, 1323 (Fed. Cir. 2003). The
23 principle behind the doctrine of prosecution disclaimer is that
24 subsequent inventors should be able to rely on the patentee's
25 definitive statements made during prosecution so as to avoid
26 infringing the patentee's invention. Id. at 1324.

27 Although generally a court applying this doctrine looks
28 to the file history for statements made during prosecution of the

1 patent, courts will occasionally find disclaimer based on
2 statements in the specification of the patent itself, such as
3 where the specification gives a limited definition to a common
4 term. See, e.g., Spectrum Int'l v. Sterilite Corp., 164 F.3d
5 1372, 1378 (Fed. Cir. 1998) ("[E]xplicit statements made by a
6 patent applicant during prosecution to distinguish a claimed
7 invention over prior art may serve to narrow the scope of the
8 claim."); Cultor Corp. v. A.E. Staley Mfg. Co., 224 F.3d 1328,
9 1331 (Fed. Cir. 2000) (finding that definition in specification
10 effected disclaimer, limiting scope of claim). "One purpose for
11 examining the specification is to determine if the patentee has
12 limited the scope of the claims." Watts v. XL Sys., Inc., 232
13 F.3d 877, 882 (Fed. Cir. 2000).

14 The scope of a claim will only be limited through
15 disclaimer where such disclaimer is "clear and unmistakable,"
16 Omega, 334 F.3d at 1326, determined by what "a competitor would
17 reasonably believe that the applicant had surrendered." Cybor
18 Corp. v. FAS Techs., Inc., 138 F.3d 1448, 1457 (Fed. Cir. 1998).

19 Thomson points to alleged disclaimers both in the
20 specification of the patent itself and in the file history.

21 1. Disclaimer in the Patent Specification Itself

22 The language in the patent specification to which
23 Thomson refers states "The [n]ovel chroma reference generating
24 means has the particular advantage of operating without PLL's
25 [phase-locked loops] or NCO's [numerically-controlled
26 oscillators]." U.S. Patent No. 5,459,524 (issued Oct. 17, 1995),
27 Col. 5, lines 53-55. Thomson argues that this statement limits
28 the scope of claims 11, 27, and 41 to products that operate

1 without PLLs or NCOs, and asks the court to rule that, as a
2 matter of law, "the invention claimed in claims 11, 27, and 41 of
3 the '524 Patent must operate without a [PLL] or [NCO]." (Def.'s
4 Mem. in Supp. of Mot. for Summ. J. of Noninfringement of the '524
5 at 14) (emphasis added).

6 The court finds this alleged disclaimer to be not
7 sufficiently "clear and unmistakable." See Omega, 334 F.3d at
8 1326. First, the specification refers to PLLs and NCOs in
9 multiple locations, showing that the preferred embodiment itself
10 does not operate without a PLL or NCO. Second, the alleged
11 disclaimer only appears once in the entire patent specification.
12 This is in contrast to the cases that Thomson cites, in which the
13 patentee's repeated assertions led to disclaimers. See Omega,
14 334 F.3d at 1327; SciMed Life Sys., Inc. v. Advanced
15 Cardiovascular Sys., Inc., 242 F.3d 1337, 1342-43 (Fed. Cir.
16 2001).

17 2. Disclaimer in the File History

18 Thomson's argument regarding patentee's alleged
19 disclaimer in the file history of the patent has merit. In his
20 attempt to distinguish the '524 patent from prior art, inventor
21 Cooper twice submitted remarks to the commissioner of patents and
22 trademarks. In remarks received at the patent and trademark
23 office ("PTO") in October 1993, Cooper argued that, while the
24 prior art used a sampling clock with a "precise and continuous
25 relationship to the color subcarrier," his invention was
26 "operable to generate references signals or values with clocks
27 which may be non harmonically related to the color subcarrier,
28 and which may be free running or locked to sync." (Maze Decl. in

Supp. of Mot. for Summ. J. of Noninfringement of the '524 Patent Ex. C (Cooper October 1993 remarks to PTO) at 1-2) (emphasis added). The same statement is repeated in remarks received in the PTO in August 1994. (Maze Decl. in Supp. of Mot. for Summ. J. of Noninfringement of the '524 Patent Ex. D (Cooper August 1994 remarks to PTO) at 2-3).¹⁵ Thomson argues that these multiple assertions by Cooper in his attempt to obtain the '524 show that Cooper distinguished his invention as having the ability to operate free running or harmonically locked to the color subcarrier, as opposed to the prior art which only had the ability to do the latter.

Plaintiff argues that the disjunctive "or" does not mean that, to infringe, a competing product must be able to operate free running and locked to sync. The context of the disclaiming statement, however, is indispensable to the analysis. The prior art, Wagner's patent, used sampling clocks that were locked to sync. There was a question about whether Cooper's new invention was truly novel. To show that it was, Cooper argued that it could operate free running or harmonically locked to

¹⁵ [In Wagner's device], a sampling clock is used which has a precise and continuous relationship to the color subcarrier . . . Wagner also teaches generating of a reference subcarrier . . . Wagner's reference subcarrier is only used to drive the PLL 26 to obtain the precisely locked $4f_{sc}$ sampling clock . . . Wagner's device is thus considerably different than applicant's inventions. Applicant's present claimed invention is operable to generate references [sic] signals or values with clocks which may be non harmonically related to the color subcarrier, and which may be free running or locked to sync.

(Maze Decl. in Supp. of Mot. for Summ. J. of Noninfringement of the '524 Patent Ex. D (Cooper August 1994 remarks to PTO) at 2-3). (emphasis added).

1 sync. The "or" in that statement simply means that the invention
2 cannot operate free running and harmonically locked to sync at
3 the same time.

4 These disclaiming statements relate to claims 11, 27,
5 and 41 of the '524 patent. The disclaiming statements address
6 the capability of the invention to generate reference signals.
7 Claims 11, 27, and 41 all address Cooper's invention's ability to
8 generate reference signals. Claim 11 teaches an apparatus that
9 demodulates, "said demodulating including operating on said
10 modulated carrier in response to at least one demodulator
11 reference signal generated by said demodulator . . ." Claim 27
12 teaches "[t]he method of generating a decoding reference signal .
13 . ." Claim 41 teaches a method that includes the step of
14 "generating a reference phase signal . . ."

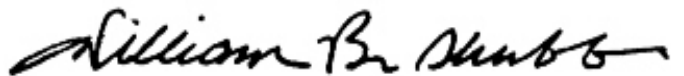
15 Nowhere in plaintiff's claim charts or elsewhere does
16 plaintiff allege that defendant's products use a sampling clock
17 that has the ability to be free running or locked to sync. In
18 the section of its response addressing this alleged disclaimer,
19 TLC does not point to any evidence that any of the accused
20 products possess the ability Cooper detailed to the patent office
21 in his successful attempt to secure the '524 patent. (Pls.' Mem.
22 in Opp'n to Def.'s Mot. for Summ. J. of Noninfringement of the
23 '524 Patent at 15-16). Thus, plaintiff has failed to allege that
24 defendant's products contain a characteristic that was essential
25 to plaintiff's procurement of the patent. Therefore, the court
26 finds that prosecution disclaimer provides alternative,
27 independent grounds on which to grant defendant summary judgment
28 of no infringement of the '524 patent.

D. Defendant's Motion for Summary Judgment on the Grounds
that It Does Not Make, Sell, or Use the TI5000 Family
of Integrated Circuits

Defendant argues that Thomson does not make, use, or sell the TI5000 family of integrated circuits. Defendant argues that Thomson Broadcast and Media Solutions, Inc. ("TBMS") may sell those products, but that TBMS is a wholly separate corporate entity from defendant and notes that TBMS is not a defendant in this case. However, the court finds it unnecessary to reach this issue because, even if defendant is wrong and Thomson does make the TI5000 family of integrated circuits, plaintiff has not produced sufficient evidence of infringement to survive defendant's summary judgment motion of no infringement.

IT IS THEREFORE ORDERED that defendant's motion for summary judgment of no infringement of patent 5,495,524 be, and the same hereby is, GRANTED.

DATED: July 22, 2005



WILLIAM B. SHUBB
UNITED STATES DISTRICT JUDGE